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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/068,779

02/05/2002

Bjorn Landfeldt

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06/09/2006

ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVR C11  
PLANO, TX 75024

EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT

PAPER NUMBER

2152

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/068,779		LANDFELDT ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Victor Lesniewski		2152	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 and 56-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 and 56-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. The amendment filed 2/17/2006 has been placed of record in the file.
2. Claims 1, 5-7, 9-15, 17, 19-23, 57, 58, and 60 have been amended.
3. The objections to claims 23 and 60 are withdrawn in view of the amendment.
4. Claims 1-23 and 56-60 are now pending.
5. The applicant's arguments with respect to claims 1-23 and 56-60 have been considered but are moot in view of the following new grounds of rejection.

### ***Continued Examination Under 37 CFR 1.114***

6. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous office action has been withdrawn pursuant to 37 CFR 1.114. The applicant's submission filed on 3/22/2006 has been entered.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 1-9, 11, 16-23, 56, 58, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul (U.S. Patent Number 6,704,798) in view of Knauerhase et al. (U.S. Patent Number 6,345,303), hereinafter referred to as Knauerhase.

9. Mogul disclosed a method for transcoding information returned by a server to a client at a proxy server. In an analogous art, Knauerhase disclosed network proxies for transcoding information that are dynamically chainable.

10. Concerning claims 1 and 17, Mogul did not explicitly state a proxy path that comprises a plurality of proxies being concatenated together to form a proxy chain. However, Knauerhase does disclose this feature as his system allows multiple different proxy processes to be run on a service between a server and client by chaining multiple proxies together between the server and client. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Mogul by adding the ability to use a proxy path that comprises a plurality of proxies being concatenated together to form a proxy chain as provided by Knauerhase. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35. This rationale also applies to those dependent claims utilizing the same combination.

11. Concerning claims 1 and 17, Mogul did not explicitly state coupling a proxy cradle to the proxy chain for handling proxy-to-proxy communications within the proxy chain. However, Knauerhase does disclose this feature as his system utilizes a destination selection module that effectuates communications between the proxies in a chain. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Mogul by adding the ability to couple a proxy cradle to the proxy chain for handling proxy-to-proxy

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communications within the proxy chain as provided by Knauerhase. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35. This rationale also applies to those dependent claims utilizing the same combination.

12. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a system are rejected under the same rationale applied to the described claim.

13. Thereby, the combination of Mogul and Knauerhase discloses:

- <Claims 1 and 17>

A method of supporting delivery, from a server to an application, of a data stream associated with a service provided by the server, comprising: selecting the server (Mogul, figure 5, item 502); requesting the service provided by the server (Mogul, figure 5, item 502); and automatically and without manual intervention, providing a proxy path between the server and the application for communicating the data stream to the application, wherein the proxy path is a communication path (Mogul, figure 5, item 506) and comprises a plurality of proxies, the plurality of proxies being concatenated together to form a proxy chain with an input of each proxy being connected to an output of each preceding proxy (Knauerhase, column 8, lines 21-27 and 35-53), coupling a proxy cradle to the proxy chain for handling proxy-to-proxy communications within the proxy chain (Knauerhase, column 7, lines 5-46), and performing a proxy operation on the data stream during the delivery of the data stream to the application, wherein the proxy operation

processes the data stream according to the characteristics required for communicating with the application (Mogul, figure 5, item 510).

- <Claims 2 and 18>

The method of Claim 1, wherein said proxy path comprises one proxy (Mogul, figure 6, item 614).

- <Claim 3>

The method of Claim 1, wherein said step of providing the proxy path includes configuring the proxy chain to provide the requested service (Mogul, figure 6, item 616).

- <Claim 4>

The method of Claim 3, further comprising the step of configuring the proxy path based on information indicative of at least one of a preference of the application, a characteristic of equipment that will receive the data stream, and a characteristic of the service (Mogul, column 6, lines 56-64 and column 8, lines 18-24 and Knauerhase, column 3, lines 45-48).

- <Claims 5 and 19>

The method of Claim 1, further comprising the steps of sending from the server side to a proxy execution environment server a request to install the proxy chain in the proxy path, the proxy execution environment server installing the proxy chain thereon in response to said installation request, and coupling the proxy execution environment server into the proxy path (Mogul, column 8, line 65 through column 9, line 30 and Knauerhase, column 3, lines 49-64).

- <Claims 6, 20, and 21>

The method of Claim 5, further comprising the steps of the proxy execution environment server downloading selected proxy modules from proxy repositories (Mogule, figure 6, item 608 and figure 1, item 104) and providing an input network service point, an output network service point and coupled with the proxy cradle, all for handling proxy-to-proxy communication within the proxy chain (Knauerhase, column 8, lines 41-53).

- <Claims 7 and 22>

The method of Claim 6, further comprising the proxy execution environment server allocating the necessary network service points for the associated proxy chain enabling the proxy chain to listen for connections and wherein the service points are TCP sockets or UDP sockets (Knauerhase, column 7, lines 47-60). {

- <Claims 8 and 56>

The method of Claim 1, wherein each of the concatenated proxies are designed as general-purpose proxy service modules and do not require direct communication to the server or the application (Mogul, column 3, line 61 through column 4, line 8).

- <Claims 9 and 23>

The method of Claim 1, wherein said providing step includes sending from the server side of the proxy path to each of a plurality of proxy execution environment servers a request to install a proxy or concatenated proxy chain from each of the plurality of proxy execution environment servers in the proxy path (Mogul, column 9, lines 1-14).

Claim 23 also presents limitations discussed in claim 11 below.

- <Claims 11 and 58>

The method of Claim 9, including the proxy execution environment servers installing the respective proxies or proxy chains thereon in response to the respective installation request (Mogul, column 8, line 65 through column 9, line 30), and the proxy execution environment servers sending to the server side of the proxy path information that identifies input and output ports to be used for coupling the respective proxy execution environment servers into the proxy path (Knauerhase, column 8, lines 21-27 and 35-53).

- <Claims 16 and 60>

The method of Claim 1, wherein said proxy operation includes one of data compression, data encryption, data transformation, data transcoding and data caching (Mogul, column 2, lines 10-14 and column 8, lines 59-64 and Knauerhase, column 3, lines 49-64).

Since the combination of Mogul and Knauerhase discloses all of the above limitations, claims 1-9, 11, 16-23, 56, 58, and 60 are rejected.

14. Claims 10, 12-15, 57, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul in view of Knauerhase, as applied above, further in view of Smith et al. (U.S. Patent Number 6,377,991), hereinafter referred to as Smith.

15. The combination of Mogul and Knauerhase disclosed a method for transcoding information returned by a server to a client at a proxy server or at a plurality of concatenated proxy servers. In an analogous art, Smith disclosed data retrieval operations between clients and servers that utilize a dynamically changing distributed cache.



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16. Concerning claims 10 and 57, the combination of Mogul and Knauerhase did not explicitly disclose sending requests in parallel to the proxy execution environment servers. However, Smith discloses a proxy server array where communications with each proxy server can occur in parallel. Since the combination of Mogul and Knauerhase discloses sending requests to the proxy servers and Smith provides a structure for communication with proxy servers in parallel, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Mogul and Knauerhase by adding the ability to send requests in parallel to the proxy execution environment servers as provided by Smith. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35.

17. Concerning claims 12-15 and 59, the combination of Mogul and Knauerhase did not discuss a parallel structure for a plurality of proxy servers and therefore did not explicitly disclose parallel proxy installations, parallel communications, and forwarding information from the server side to a plurality of proxy servers in parallel. However, Smith discloses a proxy server array where communications with each proxy server can occur in parallel. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Mogul and Knauerhase by adding the ability to complete parallel proxy installations and parallel proxy server communications as recited in claims 12-15 and 59 as provided by Smith. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35.

18. Thereby, the combination of Mogul, Knauerhase, and Smith discloses:

- <Claims 10 and 57>

The method of Claim 9, wherein said step of sending the request to each of the plurality of proxy execution environment servers includes sending the requests in parallel (Mogul, column 8, line 65 through column 9, line 30 and Smith, figure 2).

- <Claims 12 and 59>

The method of Claim 11, wherein said installing step includes the proxy execution environment servers installing the respective proxies in parallel (Mogul, column 8, line 65 through column 9, line 30 and Smith, figure 2).

- <Claim 13>

The method of Claim 12, wherein said step of sending input and output port information includes the proxy execution environment servers sending their respective input and output port information to the server side in parallel (Knauerhase, column 8, lines 21-27 and lines 35-53 and Smith, figure 2).

- <Claim 14>

The method of Claim 11, wherein said providing step includes forwarding from the server side of the proxy path to one of the proxy execution environment servers the input port information that was sent to the server side by another of the proxy execution environment servers (Knauerhase, column 8, lines 21-27 and lines 35-53 and Smith, column 19, lines 61-67).

- <Claim 15>

The method of Claim 14, wherein said forwarding step includes, for each of the proxy execution environment servers, forwarding from the server side to the proxy execution

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environment server the input port information that was sent by another of the proxy execution environment servers (Knauerhase, column 8, lines 21-27 and lines 35-53 and Smith, column 19, lines 61-67).

Since the combination of Mogul, Knauerhase, and Smith discloses all of the above limitations, claims 10, 12-15, 57, and 59 are rejected.

### ***Response to Amendment***

19. As shown above, amending the independent claims to include a proxy cradle does not distinguish them over the combination of Mogul and Knauerhase. Knauerhase sets forth functionality that handles proxy-to-proxy communications within a proxy chain. If the applicant feels that the proxy cradle distinguishes the present invention over the prior art, then the proxy cradle should be further defined in the claims so as to distinguish the claims over the prior art. Currently, it is unclear how exactly the proxy cradle functions in the system besides the fact that it is for "handling proxy-to-proxy communications". This is only a suggestion as the applicant may find other ways to more clearly define the present invention in the claims.

### ***Conclusion***

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987. The examiner can normally be reached on Monday through Thursday.

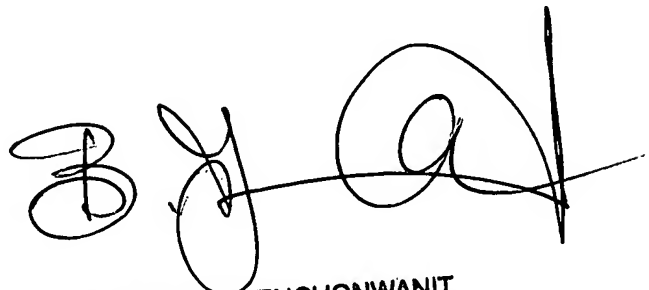
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Lesniewski  
Patent Examiner  
Group Art Unit 2152



BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER